

**(b) In the claims**

Cancel claims 1-9.

Claims 10-22 have been withdrawn from consideration.

23. (NEW) A battery separator comprising a microporous membrane having a thickness of 5 to 175 $\mu$ m, a porosity of between 30% and 95%, and an air permeability of between 1 sec/10cc and 100 sec/10cc, said microporous membrane comprised of between 70% and 95% a ultra high molecular weight polyolefin having a minimum average molecular weight of  $1 \times 10^6$ , and between 5% and 30% a TiO<sub>2</sub> particulate filler with an average particle size diameter of between 0.001  $\mu$ m and 1  $\mu$ m.

24. (NEW) A battery separator comprising a microporous membrane having a thickness of 5 to 175 $\mu$ m, a porosity of between 30% and 95%, and an air permeability of between 1 sec/10cc and 100 sec/10cc, said microporous membrane comprising a blend of between 70% and 95% of two polyethylene polymers (consisting of between 3% and 20 weight % of an ultra high molecular weight polyethylene polymer having an average molecular weight of  $2 \times 10^6$  or higher and between 80% and 95 % of polyethylene polymer having an average molecular weight of  $1 \times 10^6$  or lower), and 5% to 30% of a TiO<sub>2</sub> particulate filler with an average particle size diameter of between 0.001  $\mu$ m and 1  $\mu$ m.

25. (NEW) A battery separator comprising a microporous membrane having a thickness of 5 to 175 $\mu$ m, a porosity of between 30% and 95%, and an air permeability of between 1 sec/10cc and 100 sec/10cc, said microporous membrane comprised between 70% to 95 weight % mixture of two polyethylene polymers (consisting of between 30% and 90 weight % ultra high molecular weight polyethylene having an average molecular weight of  $1 \times 10^6$  or higher and between 10% and 50 % low molecular weight polyethylene

having an average molecular weight of 4,500 or lower), and between 5% and 30% a  $\text{TiO}_2$  particulate filler with an average particle size diameter of between 0.001  $\mu\text{m}$  and 1  $\mu\text{m}$ .

26. (NEW) The battery separator in accordance with claims 23, or 24, or 25, having melt integrity of 165°C or more.

27. (NEW) The battery separator in accordance with claims 23, or 24, or 25, and further having a shutdown temperature of 130 °C plus or minus 20°C.

28. (NEW) The battery separator in accordance with claims 23, or 24, or 25, and further having a puncture resistance of more than 300 grams/25 $\mu\text{m}$ .

29. (NEW) The battery separator in accordance with claims 23, or 24, or 25, and further having a thermal shrinkage of 10% or less both in the machine and transverse directions.

30. (NEW) The battery separator in accordance with claims 23, or 24, or 25, wherein said separator is used in a battery containing a non-aqueous (organic) electrolyte solution.

31. (NEW) A membrane in accordance with claims 23, or 24, or 25, wherein said membrane comprises a surface, and said surface is treated with a substance chosen from the group consisting of (a) a wetting agent and (b) a hydrophilic grafting agent.

32. (NEW) A battery separator in accordance with claim 23 wherein said separator has an average pore diameter of between 0.01  $\mu\text{m}$  and 1  $\mu\text{m}$ .

33. (NEW) A battery separator in accordance with claim 24 wherein said separator has an average pore diameter of between 0.01  $\mu\text{m}$  and 2  $\mu\text{m}$ .

34. (NEW) A battery separator in accordance with claim 25 wherein said separator has an average pore diameter of between 0.01  $\mu\text{m}$  and 2  $\mu\text{m}$ .

35. (NEW) A battery which comprises the battery separator in accordance with claims 23, or 24, or 25.

36. (NEW) A filter which comprises the battery separator in accordance with claims 23, or 24, or 25, or 31.